

Hydrology Investigation at a Glance



Protocols

Weekly Measurements:

Transparency
Water Temperature
Dissolved Oxygen
pH
Electrical Conductivity
Salinity
Alkalinity
Nitrate

Suggested Sequence of Activities

Read the scientists' letter before you head out into the field.

Water Walk sets the stage for developing interest in water quality/chemistry.

Model Your Watershed provides the big picture view of students' watershed and the water study site in relation to this watershed.

Practicing the Protocols guides students through learning how to use the instruments and following the protocols so they collect reliable data.

Begin Field Sampling: your class goes to its site and begins the weekly measurements for water.

Focus on Key Science Ideas by performing the following Learning Activities:

Water Detectives and *The pH Game* introduce students to key water chemistry variables and to the need for instrumentation to make certain measurements.

Water, Water Everywhere! How Does it Compare? shows students how to analyze trends in their data and compare their data to other schools' data. This activity should be ongoing and repeated regularly as the data accumulates.

Modeling Your Water Balance lets students explore how to use their data for modeling.

Macroinvertebrate Discovery explores the connection between water measurements and aquatic life. This activity could be ongoing and repeated as conditions change.

Start linking water data to other GLOBE data.

